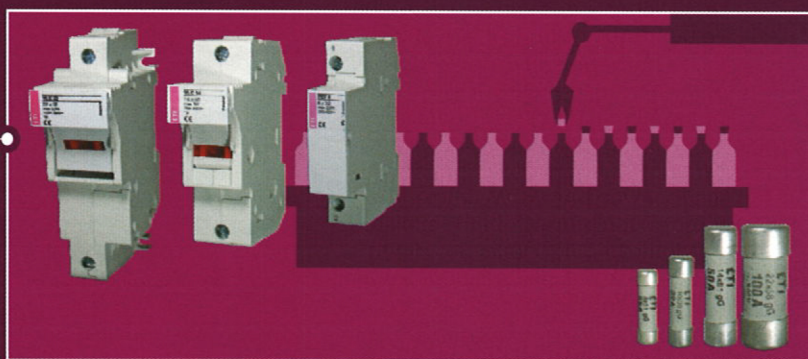


## INDUSTRIAL INSTALLATIONS

High-quality protection of installations and devices in industry is ensured by wide selection of fuse-links and circuit breakers. Particularly important is the wide range of NV/NH fuse-links and switchgear combinations, i.e. fuse blocks and switch disconnectors. We also offer MCB's and power circuit breakers ETIBREAK. And not to forget ETICON contactors, plug-in outfit and line-up terminals SPOJ and overvoltage protection devices ETITEC. As well we can not provide solutions without switch disconnectors ETISWITCH and actuators and indicators ETISIG. The products are internationally certified and carry several quality marks.



INDUSTRY

## Strip type fuse-switch-disconnectors

### NV/NH Strip type fuse-switch-disconnector sizes 00, 1, 2, 3

#### Characteristics of the NV/NH Strip type fuse-switch-disconnectors

The NV/NH Strip type fuse-switch-disconnectors are 3-pole bases of NV/NH fuse cartridges, intended for busbar mounting. An NV/NH Strip type fuse-switch-disconnectors comprises three single-pole connections in one unit. Each contact at an individual phase is connected to the phase on the busbar system. The other contacts are fitted with cable connecting terminals or intended for attachment of the following busbar system.

#### Use

The NV/NH Strip type fuse-switch-disconnectors are mainly used for cable distribution and power supply systems, transformer systems, where they are connected when electric energy transmission is required. The following rated currents are available: 160 A, 250 A, 400 A, 630 A.

#### Principle of operation

The NV/NH Strip type fuse-switch-disconnectors are used in combination with NV/NH fuse cartridges protecting the circuit against shorts. The upper part of the NV/NH Strip type fuse-switch-disconnectors with insulation class IP3X is provided with a separate test opening through which the live state can be tested according to DIN VDE 0680, part 5.

#### Design of the NV/NH Strip type fuse-switch-disconnectors

The insulated supporting body is made of one piece, the material is polyester reinforced with glass fibres. A silver-plated contact system, fitted with tinned extinction chambers, ensures a low power dissipation, optimum thermal characteristics and a high breaking capacity. The contact derived parts are intended for cable connections or for attachment of the next busbar system. All the live parts are protected against accidental contacts - in conformity with BVG A2. A special form of the contact part cover ensures a safe insertion and removal of the NV/NH fuse cartridges.

#### Short description

The NV/NH Strip type fuse-switch-disconnectors are mostly used for installation into cable distribution cabinets and power supply systems - in accordance with IEC/EN 61439-1. The NV/NH Strip type fuse-switch-disconnectors have been tested in accordance with IEC/EN 60947-3. They are available for the sizes of fuse cartridges from 00 to 3, with both single-pole and 3-pole switching-on.

#### Advantages

- upper or lower cable connection - as required
- optimum pull contact
- direct connection
- double strip connection up to 1250 A
- universal cover
- high breaking capacity
- low power dissipation
- use of standard earthing connections
- modular construction

#### Main types of the NV/NH Strip type fuse-switch-disconnectors - characteristics

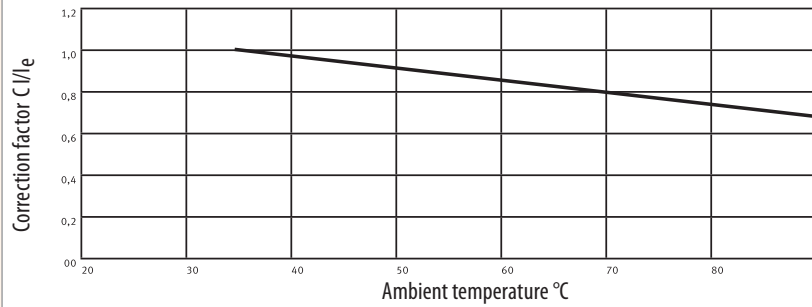
Basically, as shown, there are several types of the NV/NH Strip type fuse-switch-disconnectors:

- for a 3-pole switching-in
- for a single-pole switching-in
- for attachment directly to a busbar system
- with side contacts for a busbar system

All the NV/NH Strip type fuse-switch-disconnectors are fitted with new, modern Delta contact systems allowing optimum pressure contact between the fuse cartridge and the NV/NH Strip type fuse-switch-disconnectors, resulting in extremely low level of power dissipation and heating-up. All the standard NV/NH Strip type fuse-switch-disconnectors shown in the catalogue are intended for general usage. Upon request appropriate individual configurations can be designed - in such cases please contact our sales engineers, or call us to the factory.



Influence of ambient temperature on rated current of NH strip-type fuse-switch-disconnectors



Rated diversity factor acc to IEC EN 61439-2:2012-06 table 101

No. of main circuits	Rated diversity factor
2 & 3	0,9
4 & 5	0,8
6 ... 9	0,7
10 ≤	0,6

General table of NV/NH strip type-fuse-switch-disconnector-single-pole switching-in

Size	Code No.	Busbar system	Product designation	Product designation	Switch lever	Weight [kg]	Packaging [pcs]
00	001692010	185	SL00 1P M8	flat connection - screw M8	standard	2,4	1/1
00	001692012	185	SL00 1P SP.95	V-clip 10-95 mm <sup>2</sup>	standard	2,4	1/1
1	001692110	185	SL1 1P M10	screw M10	standard	4,9	1/1
1	001695200	185	SL1H 1P M10*	screw M10	standard	4,9	1/1
1	001692111	185	SL1 1P SP.300	V-clip 25-300 mm <sup>2</sup>	standard	4,9	1/1
1	001695201	185	SL1H 1P SP.300*	V-clip 25-300 mm <sup>2</sup>	standard	4,9	1/1
1	001692112	185	SL1 1P SP.240	V-clip 25-240 mm <sup>2</sup>	standard	4,9	1/1
1	001695202	185	SL1H 1P SP.240*	V-clip 25-240 mm <sup>2</sup>	standard	4,9	1/1
2	001692210	185	SL2 1P M12	screw M12	standard	4,9	1/1
2	001695220	185	SL2H 1P M12*	screw M12	standard	4,9	1/1
2	001692211	185	SL2 1P SP.300	V-clip 25-300 mm <sup>2</sup>	standard	4,9	1/1
2	001695221	185	SL2H 1P SP.300*	V-clip 25-300 mm <sup>2</sup>	standard	4,9	1/1
2	001692212	185	SL2 1P SP.240	V-clip 25-240 mm <sup>2</sup>	standard	4,9	1/1
2	001695222	185	SL2H 1P SP.240*	v-clip 25-240 mm <sup>2</sup>	standard	4,9	1/1
3	001692310	185	SL3 1P M12	screw M12	standard	5,6	1/1
3	001692311	185	SL3 1P SP.300	V-clip 25-300 mm <sup>2</sup>	standard	5,6	1/1
3	001692312	185	SL3 1P SP.240	V-clip 25-240 mm <sup>2</sup>	standard	5,6	1/1

\* H - "Omega" contact (make short - circuit current 80 kA)

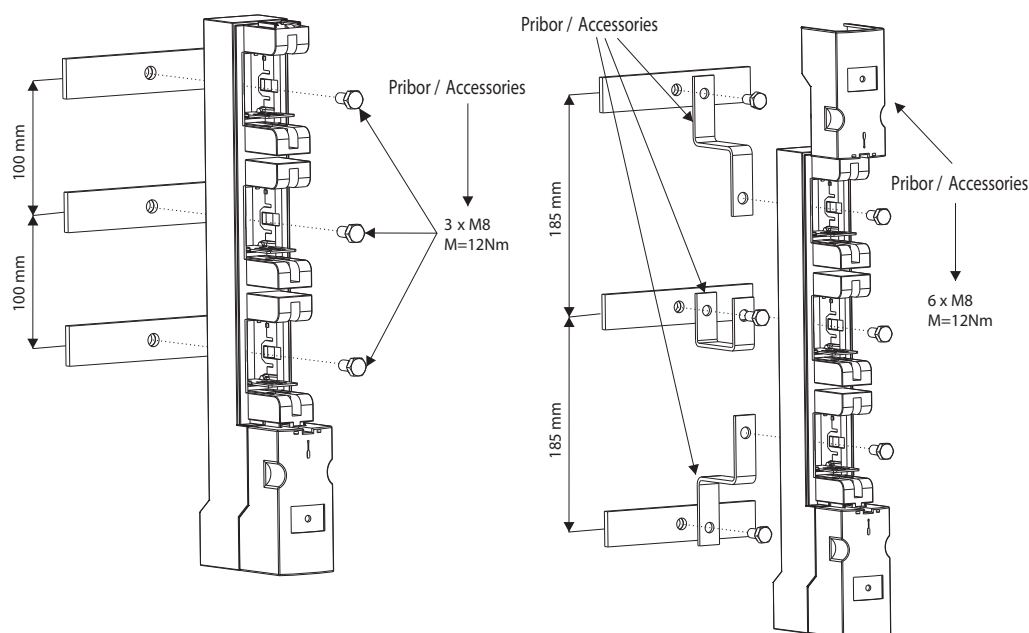
General table of NV/NH Strip type fuse-switch-disconnector-three-pole switching-in

Size	Code No.	Busbar system	Product designation	Connection description	Weight [kg]	Packaging [pcs]
00	001692034	100	SL00/100 3P M8-2	flat connection - screw M8	1	1/1
00	001692035	100	SL00/100 3P SP.70-2	V-clip 10-70 mm <sup>2</sup>	1	1/1
00	001692032	185	SL00 3P M8	flat connection - screw M8	2,4	1/1
00	001692033	185	SL00 3P SP.95	V-clip 10-95 mm <sup>2</sup>	2,4	1/1
1	001692130	185	SL1 3P M10	screw M10	4,9	1/1
1	001695210	185	SL1H 3P M10 *	screw M10	4,9	1/1
1	001692131	185	SL1 3P SP.300	V-clip 25-300 mm <sup>2</sup>	4,9	1/1
1	001695211	185	SL1H 3P SP.300*	V-clip 25-300 mm <sup>2</sup>	4,9	1/1
1	001692132	185	SL1 3P SP.240	V-clip 25-240 mm <sup>2</sup>	4,9	1/1
1	001695212	185	SL1H 3P SP.240*	V-clip 25-240 mm <sup>2</sup>	4,9	1/
2	001692000	185	SL2 3P SP.300	V-clip 25-300 mm <sup>2</sup>	4,9	1/1
2	001695231	185	SL2H 3P SP.300*	V-clip 25-300 mm <sup>2</sup>	4,9	1/1
2	001692230	185	SL2 3P M12	screw M12	4,9	1/1
2	001695230	185	SL2H 3P M12*	screw M12	4,9	1/1
2	001692231	185	SL2 3P SP.240	V-clip 25-240 mm <sup>2</sup>	4,9	1/1
2	001695232	185	SL2H 3P SP.240*	V-clip 25-240 mm <sup>2</sup>	4,9	1/1
3	001692330	185	SL3 3P M12	screw M12	5,6	1/1
3	001692331	185	SL3 3P SP.300	V-clip 25-300 mm <sup>2</sup>	5,6	1/1
3	001692332	185	SL3 3P SP.240	V-clip 25-240 mm <sup>2</sup>	5,6	1/1

\* H - "Omega" contact (make short - circuit current 80 kA)



## Technical data



## NV Strip type fuse-switch-disconnector sizes 00, 1, 2, 3

Technical data of NV strip type fuse-switch-disconnectors (in accordance with IEC/EN 60947-3)											
Technical Specifications			SL00/100			SL00/185			SL1		
Electrical Characteristics											
Rated operational voltage	$U_e$	V	500 AC	690 AC	400 AC	500 AC	690 AC	400 AC	500 AC	690 AC	400 AC
Rated operational current	$I_e$	A	160	100	160	160	160	160	250	250	250
Rated frequency	-	Hz	40-60	40-60	40-60	40-60	40-60	40-60	40-60	40-60	40-60
Rated insulation voltage	$U_i$	V	AC 800						AC 1000		
Total power loss at $I_m$ (without fuse)	$P_v$	W	18						23		
Utilization category	-	-	AC22B	AC22B	AC22B	AC23B	AC22B	AC23B	AC22B	AC22B	AC23B
Fuse links											
Size - DIN 43 620, IEC 60269-2	-	-	000/00						1		
Max. rated current (gG)	$I_n$	A	160	100	160	160	160	160	250	250	250
Max. permissible power loss per fuse link	$P_v$	W	12						32		
Dimensions											
Mass	-	kg	100 mm = 1,40			185mm=2,4			4,9		
Busbars (distance)	-	mm	100			185			185		
Cable connection											
Screw	-	-	M8						M10		
Torque	Ma	Nm	12-15						30-35		
V-clip	-	mm <sup>2</sup>	10-95						25-300		
Torque	Ma	Nm	15						32		
Protection											
Operational state	-	-	IP30						IP30		
Cover open	-	-	IP10						IP10		
Operating conditions											
Ambient temperature	$T_v$	°C	-25 ... +55						-25 ... +55		
Operating condition	-	-	Continuous operation								
Mounting	-	-	vertical, horizontal								
Altitude	-	m	≤ 2000								
Pollution degree	-	-	3								
Overvoltage category	-	-	III			IV					



